

Appl. No. 10/675,797
Amdt. Dated May 18, 2006
Reply to Office Action of March 9, 2006

Attorney Docket No. 81864.0026
Customer No.: 26021

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method for manufacturing an R-T-B system rare earth permanent magnet comprising a sintered body with a composition consisting essentially of 25% to 35% by weight of R (wherein R represents one or more rare earth elements, providing that the rare earth elements include Y), 0.5% to 4.5% by weight of B, 0.02% to 0.6% by weight of Al and/or Cu, 0.03% to 0.25% by weight of Zr, 4% or less by weight (excluding 0) of Co, and the balance substantially being Fe,

said manufacturing method comprising the steps of:

manufacturing a compacted body containing a low R alloy containing a $R_2T_{14}B$ compound as a main constituent and Zr, and a high R alloy containing, as main constituents, R and T (wherein T represents at least one transition metal element essentially containing Fe, or Fe and Co), wherein said high R alloy contains a higher amount of R than said low R alloy; and

sintering the compacted body.

2. (Original) A method for manufacturing an R-T-B system rare earth permanent magnet according to claim 1, wherein said low R alloy contains Cu and/or Al as well as Zr.

3. (Original) A method for manufacturing an R-T-B system rare earth permanent magnet according to claim 1, wherein a suitable sintering temperature range is 40°C or more in order that said R-T-B system rare earth permanent magnet has squareness (H_k/H_{cJ}) of 90% or more.

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4. (Original) A method for manufacturing an R-T-B system rare earth permanent magnet according to claim 1, wherein the content of Zr in said sintered body is between 0.05% and 0.2% by weight.

5. (Original) A method for manufacturing an R-T-B system rare earth permanent magnet according to claim 1, wherein the content of Zr in said sintered body is 0.1% to 0.15% by weight.

6. (Original) A method for manufacturing an R-T-B system rare earth permanent magnet according to claim 1, wherein the amount of oxygen contained in said body is 2,000 ppm or less.